Abstract

Introduction: Cardiovascular disease is one of the most important causes of death in the world. Knowledge about understanding the cause of acute coronary syndrome and its related risk factors is one of the important priorities in the health system. In this study, the effect of C-reactive protein with high sensitivity in patients with acute coronary syndrome as an indicator for prognosis of mortality and internal morbidity in Qazvin province was evaluated.

Methods: In this Analytical descriptive study, patients were divided into 2 groups based on the initial quantitative CRP level: the first group included high risk patients with a high CRP level of mgr / dlit 3, and the second group, including low risk patients with CRP levels less than mgr / dlit 3. During the admission, patients were evaluated by completing the questionnaire in terms of symptoms such as increased dyspnea or chest pain, motility, repeat heart attack, heart failure, in-hospital complications and the need for admission to the CCU.

Results: Data from 152 patients with acute coronary syndrome were analyzed for high risk CRP (82 cases (53.9%) and low risk CRP (70 (46.1%)). The rate of heart failure based on the ejection fraction rate was significantly higher in the High risk group. Besides, CRP had significant relationship with heart dysfunction based on Newyork heart scale and MMRC dyspenea scale.Mean hospitalization time in ccu was significantly longer in high risk group than other one.($p<0.05$)

Conclusion: CRP was effective in predicting heart failure (based on ejection fraction), heart dysfunction based on Newyork heart scale and MMRC dyspenea scale in acute coronary syndrome.

Keywords: C-reactive protein, acute coronary syndrome, mortality, morbidity.